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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,034	07/10/2001	Brian W. Connor	003B.00020.U1(US)	7786

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EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 11/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,034

Applicant(s)

CONNOR ET AL. 

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-17, 19, 21 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 7-17, 19 and 21 is/are allowed.
- 6) ☒ Claim(s) 24 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 25 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 22 October 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on October 22, 2002, .

These drawings are approved.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrader (Pat Num 5,200,576) in view of Burndy Electrical, a technical data sheet

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describing the YH3429 Connector (herein referred to as Burndy). Schrader discloses an electrical compression connector (Figs 1 & 4) for securing at least three conductors or cables in place (abstract). Specifically, with respect to claim 24, Schrader discloses an electrical compression connector (10) comprising a first section (upper half of 12) having a first conductor receiving channel (18) extending into a top side of the connector (10) and a second section (lower half of 12) integrally formed with the first section (upper half of 12), wherein the second section (lower half of 12) has a second receiving channel (26) and a third receiving channel (28) extending into opposite respective first and second lateral sides (left and right sides respectively) of the connector (10), wherein the second conductor receiving channel (26) comprises opposing concave surfaces (denoted in red by 100 & 200) having different shapes (the top curved surface 100 is narrower than the bottom curved surface 200) and a side surface between the two opposing concave surfaces (100 & 200 respectively) having a round shape (Fig 4). With respect to claim 27, Schrader discloses that the second section (lower half of 12) comprises a width, which is larger than the width of the first section (top half of 12, Fig 4). With respect to claim 28, Schrader discloses that the opposing concave surfaces (100 & 200) having about the same width (Fig 4). With respect to claim 29, Schrader discloses that a top one of the opposing surfaces (denoted as 400) comprises an outer downward extending projection and a bottom one of the opposing surfaces (denoted as 300) comprises an upward extending tip, wherein the projection (400) and the tip (300) are located opposite each other (Fig 4).

However, Schrader doesn't necessarily disclose the side surface between the two opposing concave surfaces being substantially flat shaped (claim 24), nor the flat side surface extending more than a third of the total height of the second conductor receiving channel (claim 30).

Burndy teaches a YH3429 Connector (Fig 2) that is known and commercially available for making parallel and tap connections, including combinations of copper Class 1 flexible stranding and code conductors (see interactive product catalog page). Specifically, with respect to claim 24, Burndy teaches that the YH3429 connector (Fig 2) comprises a second connector receiving channel (denoted as Tap 1) comprising a side surface (see attached drawings detailing the area in red) between the two opposing concave surfaces (upper and lower surfaces in the second connector receiving channel) that has a substantially flat shaped portion for accommodating tap conductors in the range of 1/0 AWG to 250 Kmil (see interactive product catalog page). With respect to claim 30, Burndy teaches that the flat surface portion extends about a third of the total height (see attached drawings detailing the area in red) of the second conductor receiving channel (denoted as Tap 1).

With respect to claims 24 & 30, it would have been obvious to one having ordinary skill in the art of cable connectors at the time the invention was made to modify the connector of Schrader to comprise the second conductor receiving channel configuration comprising a side surface having a substantially flat shape portion as taught by Burndy because Burndy teaches that such a configuration is well-known for accommodating tap conductors in the range of 1/0 AWG to 250 Kmil and commercially

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available for making parallel and tap connections, including combinations of copper Class 1 flexible stranding and code conductors (see interactive product catalog page) and since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835.

Allowable Subject Matter

5. Claims 1-4, 7-17, 19, and 21 are allowed.
6. Claims 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is a statement of reasons for the indication of allowable subject matter: This invention deals with an electrical compression connector having a second radius of curvature that is about 25% smaller than the first radius of curvature (claims 1, 15, & 18). This invention also deals with an electrical compression connector wherein the third conductor receiving channel comprises two opposing surfaces and a side surface between the opposing concave surfaces having a substantially flat shape (claims 13, 21, & 25). The above stated claim limitations, in combination with other claim limitations, is not taught or suggested by the prior art of record. Claims 2-4 and 7-12 are depended upon allowed claim 1, claim 14 is depended upon allowed claim 13, claims 16-17 and 18 are depended upon allowed claim 15 and therefore are allowed.

Response to Arguments

8. Applicant's arguments filed October 23, 2002 have been fully considered but they are not persuasive. The applicant argues the following:

- A) There is no disclosure or suggestion of adding a flat side between two opposing concave surfaces.
- B) Adding a flat side to the recess in Schrader would elongate the connector and therefore make it unsuitable for use with pre-existing compression dies.

With respect to arguments A & B, the examiner respectfully traverses. While the examiner agrees that there is no written disclosure, the examiner respectfully disagrees that there is no teaching or suggestion of adding a flat side. Burndy teaches that such a configuration is well-known for accommodating tap conductors in the range of 1/0 AWG to 250 Kmil and commercially available for making parallel and tap connections, including combinations of copper Class 1 flexible stranding and code conductors (see interactive product catalog page). Secondly, the courts have been consistent in establishing that change in shape or form cannot sustain patentability. Specifically, it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. In re Span-Deck Inc. vs. Fab-Con Inc. (CA 8, 1982) 215 USPQ 835. Schrader clearly teaches that such a modification is in the scope of his claimed invention and therefore such a modification would not damage the functionality of the connector. Specifically, Schrader states in Col 2, lines 55-59,

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"While the present invention has been illustrated in connection with two preferred embodiments, it should be understood that many variations will occur to those skilled in the art, and **that other types of compression connector geometries may be utilized.**"

In light of the above comments, the examiner willfully submits that the rejection of claims 24 and 27-30 under 35 USC 103 (a) is both proper and just.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

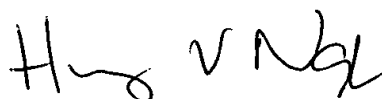
Communication

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30 a. m.-6:00 p.m.(alternating Friday's off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

WHM III
November 23, 2002



HUNG V. NGO
PATENT EXAMINER